a delegation of the request to another server when the computer is inappropriate to fulfill the request.

29. (New) The medium of claim 20, wherein the second predetermined type is a delegable client that understands a delegation of the request to another server.

REMARKS

Preliminarily, the record reflected in the Interview Summary of the telephonic interview of February 21, 2003 is slightly incorrect. In particular, the Interview Summary presently incorrectly reflects that applicants agreed to amend the claims related to step 4 (i.e., upon receiving the error message at the client, repeating sending the request to a next server of the list until the error message is not received). Applicants' representative, Grace Law, subsequently phoned the examiner to correct the record on February 24, 2003, and the examiner asked applicants to correct the record of the interview in the next Office action. Accordingly, the Interview Summary is corrected in that it is applicants' understanding that the examiner and the applicants are in agreement that a user (i.e., human entity) cannot be used to perform this type of function within a computer-implemented method. Thus, the argument that a user of the network can keep searching, thus repeating the sending of the request to subsequent servers does not apply in this context, and a new search, in line with applicants' arguments, should be conducted. However, although applicants do not agree with the asserted arguments, applicants nevertheless amended claims 1, 6, 11, 16, 18, 19, 22, and 26 to more clearly recite the features of the present invention.

Original claims 1-28 have been examined. No claims have been allowed. Independent claims 1, 6, 11, 16, 18, 19, 22, and 26 have been amended, and new claim 29 has been added in this amendment. Favorable reconsideration of claims 1-29 is requested in view of the following remarks.

In the Office action mailed December 18, 2002, claims 1, 6, 11-13, 16, 18-24, and 26-28 are rejected under 35 U.S.C. §102(e) as anticipated by Takano (U.S. Patent No. 5,884,301). Claims 2-4, 7-9, 14, 17, and 25 are rejected under 35 U.S.C. §103(a) as obvious over Takano in

view of Hecht (U.S. Patent No. 5,535,322). Claims 5, 10, and 15 are rejected under 35 U.S.C. §103(a) as being obvious over Takano in view of Russell et al. (U.S. Patent No. 5,617,570).

The following remarks are grouped to reflect the organization of the Office action.

APPLICANTS' RESPONSE

Drawings:

The drawings have been designated as informal drawings by the Office action. However, the drawings originally filed are formal drawings. Applicants request that the originally filed formal drawings be considered.

Claim Rejections – Claims 1, 6, 11-13, 16, 18-24, and 26-28

Claims 1, 6, 11-13, 16, 18-24 and 26-28 are rejected under 35 U.S.C. §102(e) as being anticipated by Takano (U.S. Patent No. 5,884,301). In particular, the examiner argued that a user of the network can keep searching, thus repeating the sending of the request to subsequent servers. However, applicants noted during the interview that a user (i.e., human entity) cannot be used to perform this type of function within a computer-implemented method. Nevertheless, to expedite the prosecution of the present application, applicants amended independent claims 1, 6, 11, 16, 18, 19, 22, and 26 to clarify that the step of repeating the sending of the request to a next server of the list is automatically performed. Contrary to the Office action, Takano does not disclose the feature of automatically repeating the sending of the request to a next server of the list until the error message is not received as recited in claims 1, 6, 11, 16, and 18. Moreover, the cited reference also does not disclose the feature of sending an error message that a computer is off-line in response to a request from a non-delegable client that does not understand a delegation of the request to another server when the computer is inappropriate to fulfill the request as recited in claims 19, 22, and 26.

The present invention relates to network communications between directory servers and clients (Applicants' specification, page 1, lines 16-21). In one embodiment of the present invention, when a server cannot fulfill a request from a non-delegable client (e.g., a client that does not understand a delegation of the request to another server), the server sends an error

message indicating that it is off-line to the client, even though the server is actually on-line (Applicants' specification, page 3, lines 9-14). Because the error message indicating that the server is off-line is sent to the client, the server is able to compel the non-delegable client to contact another server with the request (Applicants' specification, page 4, lines 1-5). Since multiple servers from the list of servers can respond to the request (Applicants' specification, page 2, lines 4-6), one of the servers from the list eventually fulfills the request from the client. Thus, non-delegable clients are able to exist in a client-server architecture where the servers do not maintain enterprise-wide directory service-related information (Applicants' specification, page 4, lines 5-8).

The Takano reference, on the other hand, discloses a search engine of a hypermedia system for managing node link information using a directory server. In the Internet server-client architecture disclosed in the Takano reference, each node identifier (i.e., uniform resource locator – URL) is associated with only one server, and is not related, as in the present application, to multiple servers from a list of servers that can respond to a request of a client. Although, in the Internet server-client architecture, an error message claiming that the requested server is off-line is displayed to the user, the user's web browser takes no further action in response to the error message. The Examiner then argued that nonetheless, a user can keep searching (e.g., repeating) for a different URL and sending the request to another server. However, the claims in the present application relate to a computer implementation to perform the claimed features. Thus, a user cannot perform any of the recited steps, since a user is a human entity and not a computer implementation. Moreover, applicants amended the claims to more clearly recite that this step is automatically performed in the present invention.

Claims 12-13, 20-21, 23-24, and 27-28 are patentable for at least the same reasons as independent claims 11, 19, 22, and 26, from which they respectively depend. However, applicants also note that since the web browser and the server disclosed in Takano take no further action in response to an error message, Takano does not disclose servers designed to delegate a request or a second client of a second predetermined type recited in claim 12, 13, 20, 23, and 27. Accordingly, applicants request that the Section 102 rejection of claims 1, 6, 11-13, 16, 18-24 and 26-28 be withdrawn.

Claim Rejections – Claims 2-4, 7-9, 14, 17, and 25

Claims 2-4, 7-9, 14, 17, and 25 are rejected under 35 U.S.C. §103(a) as being unpatentable over Takano in view of Hecht (U.S. Patent No. 5,535,322). Claims 2-4, 7-9, 14, 17, and 25 are patentable for at least the same reasons as independent claims 1, 6, 11, 16 and 22, from which they respectively depend. Moreover, applicants also note that no motivation or suggestion can be drawn from the cited references to make the asserted combination to include the queue manager recited in claims 2, 3, 7, 8, and 14, because both references relate to different fields and thus address different problems. Takano relates to a hypermedia system that stores linkage relationship between information stored on a storage means, and specific information can be retrieved through searching the linkage relationship (Abstract). On the other hand, Hecht relates to a work flow system that provides for automating office procedure to coordinate the flow of work between office personnel (Abstract, Col. 3, lines 5-42). Since, as shown, Takano and Hecht relates to vastly different fields of invention, it has not been shown that any motivation or suggestion can be drawn from the cited reference to make the asserted combination. Accordingly, for this further reason, applicants request that the Section 103 rejection of dependent claims 2-4, 7-9, 14, 17, and 25 be withdrawn.

Claim rejections – Claims 5, 10, and 15

Claims 5, 10, and 15 are rejected under 35 U.S.C. §103(a) as being unpatentable over Takano in view of Hecht, and further in view of Russell et al. (U.S. Patent No. 5,617,570). Claims 5, 10 and 15 are patentable for at least the same reasons as independent claims 1, 6, and 11, from which they respectively depend. Moreover, applicants also note that no motivation or suggestion can be drawn from the cited references to make the asserted combination to include the remote procedure call recited in claims 2, 3, 7, 8, and 14. Russell et al. addresses the problem of client and server platforms having multiple different operating systems in a data processing system using remote procedure calls (Col. 1, lines 12-42). On the other hand, Takano relates to a retrieval process that searches stored linkage relationship between information in a hypermedia system, and Hecht relates to a work flow system that automates office procedures. Because these cited references again relate to different fields, and thus address vastly different

problems from each other, no motivation or suggestion can be drawn from these references to make the asserted combination to include the remote procedure call as claimed. Accordingly, applicants request that the Section 103 rejection of dependent claims 5, 10, and 15 be withdrawn.

New Claim-Claim 29

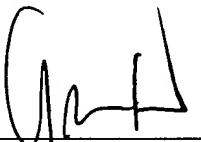
Applicants have also added new claim 29 to define the second predetermined type recited in claim 20. Claim 29 is patentable for at least the same reasons as independent claim 20. Applicants request consideration of new claim 29, and submit that it is also allowable over the cited references.

In view of the foregoing amendments and remarks, applicants submit that the present application is in condition for allowance. An early and favorable action is earnestly requested.

CONCLUSION

The application is considered in good and proper form for allowance, and the examiner is respectfully requested to pass this application, including pending claims 1-29, to issue. If, in the opinion of the examiner, a telephone conference would expedite the prosecution of the subject application, the examiner is invited to call the undersigned attorney.

Respectfully submitted,



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Date: April 17, 2003

PATENT
Attorney Docket No. 212748

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

JUSTER et al.

Application No. 09/461,487 Group Art Unit: 2155

Filed: December 14, 1999 Examiner: LaForgia, Christian A.

For: NON-DELEGABLE CLIENT REQUEST TO SERVERS STORING LOCAL INFORMATION ONLY

AMENDMENTS TO THE CLAIMS MADE IN RESPONSE TO OFFICE ACTION DATED DECEMBER 18, 2002

IN THE CLAIMS:

Please **amend** claims **1, 6, 11, 16, 18, 19, 22** and **26** and **add** claim **29** as follows:

1. (Amended) A computer-implemented method comprising:

sending a request from a client to a server of a list of servers;

determining at the server whether the server is inappropriate to fulfill the request;

upon determining that the server is inappropriate to fulfill the request,

sending an error message from the server to the client that the server is off-line; and,

upon receiving the error message at the client, automatically repeating the sending of the request to a next server of the list until the error message is not received.

6. (Amended) A machine-readable medium having instructions stored thereon for execution by a processor of a client to perform a method comprising:

sending a request to a server of a list of servers;

receiving a response to the request from the server; and

upon determining that the response comprises an error message that the server is off-line, as used by the server when the server is inappropriate to fulfill the request,

automatically repeating the sending of the request to a next server of the list until the error message is not received.

11. (Amended) A computerized system comprising:

a plurality of servers, each server designed to send an error message that the server is off-line in response to receiving a request the server is unable to fulfill locally and received from a client of a predetermined type; and

a client of the predetermined type and designed to automatically repeat the sending of a request to a different one of the plurality of servers until the error message is not received in response.

16. (Amended) A client computer comprising:

a communications device; and,

a computer program designed to automatically repeat sending a request to a different server of a list of servers via the communications device until an error message ~~that~~ indicating a ~~the~~ server receiving the request is off-line ~~as used by the server when the server is inappropriate to fulfill the request~~ is not received ~~in response~~.

18. (Amended) A machine-readable medium having instructions stored thereon for execution by a processor to transform a general purpose computer to a special purpose computer comprising:

a communications device; and

means for automatically repeating the sending of a request to a different server of a list of servers via the communications device until an error message that the server is off-time as used by the server when the server is inappropriate to fulfill the request is not received in response.

19. (Amended) A machine-readable medium having instructions stored thereon for execution by a processor of a server to perform a method comprising:

receiving a request from a client;

determining whether the server is inappropriate to fulfill the request;

determining whether the client is of a predetermined type; and,

upon determining that the server is inappropriate to fulfill the request and that the client is ~~of the predetermined type~~ a non-delegable client that does not understand a delegation of the request to another server, sending an error message to the client that the server is off-line.

22. (Amended) A server computer comprising:

a communications device; and,

a computer program designed to send via the communications device an error message that ~~the~~ a server computer is off-line in response to a request from a non-delegable client ~~of a predetermined type~~ that does not understand a delegation of the request to another server when the server computer is inappropriate to fulfill the request.

26. (Amended) A machine-readable medium having instructions stored thereon for execution by a processor to transform a general purpose computer to a special purpose computer comprising:

a communications device; and,

means for sending via the communications device an error message that ~~the~~ a computer is off-line in response to a request from a non-delegable client ~~of a predetermined type~~ that does not understand a delegation of the request to another server when the computer is inappropriate to fulfill the request.

29. (New) The medium of claim 20, wherein the second predetermined type is a delegable client that understands a delegation of the request to another server.